



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,424	06/14/2001	Craig M. Wittenbrink	10001077-1	8406

7590

08/23/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

WOODS, ERIC V

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/881,424	WITTENBRINK, CRAIG M.	
	Examiner	Art Unit	
	Eric V. Woods	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The affidavit filed on 27 December 2004 under 37 CFR 1.131 is **NOT** sufficient to overcome the Morein reference.

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Morein reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Morein reference. The affidavit fails to show that the conception and reduction to practice.

The declaration under 37 CFR 1.131 filed 27 December 2004 is insufficient to overcome the rejection of claims 1-2, 4-12, and 14-22 over Morein under 35 USC § 102(e) and the rejection of claims 3 and 13 under 35 U.S.C. 103(a) under 35 USC § 103(a) as set forth in the last Office action on 17 August 2004 because it is not properly executed and fails to establish reduction to practice prior to the date of the reference.

- I. The affidavit is ineffective because it was not properly executed.

Under 37 CFR 1.131(a) *inter alia*, "...Prior invention may ... be established under this section in a NAFTA country ... the United States ... or ... a WTO member country".

There is no statement in the affidavit that applicant was in such country or had possession of, had reduced to practice, or conceived of such invention in such country as required above.

Applicant has not met this criterion above. Therefore, the affidavit is ineffective on its face.

II. The affidavit will now be analyzed for sufficiency and compliance with the appropriate rules, and its numerous deficiencies will be noted.

Specifically, the affidavit is only one page.

The first statement (item 1) and the last paragraph merely establish that applicant is attesting to the truth of the statements and acknowledging the penalties for perjury, thus meeting the *legal* obligations for an affidavit (a legal instrument). The second statement (item 2) and the signature below do show and satisfy the requirement under 37 CFR 1.131 that all inventors sign such affidavits.

The third statement (item 3) lists an **attachment** to the affidavit, which by itself is insufficient. 37 CFR 1.131(b) states *inter alia* "... Original exhibits of drawings and records ... must accompany **and form part of the affidavit or declaration or their absence satisfactorily explained** (emphasis added). Item 3 merely sets forth that such documentation is attached to the affidavit, not incorporated. Therefore, as stated above, the affidavit **FAILS** to comply with the requirement.

The fourth item merely asserts that the attached documentation establishes reduction to practice and conception of the invention as of a certain date. There is **absolutely** no explanation of how the attached documentation is related to any of the patentable claims, or any explanation of how such material. The fifth asserts that the applicant was in possession of the invention of all claims of the application and had reduced such to practice prior to a certain date (and the fourth item asserts that applicant had reduced such invention to practice by an earlier date (November 11, 1999). Those paragraphs are **CONCLUSORY** statements, **NOT** facts.

Applicant also has attached pages of laboratory notebooks, but does not ever mention or discuss those. These are not properly part of the affidavit, and are not even referenced, and are thusly ignored.

MPEP 715.07 clearly states:

"The essential thing to be shown under 37 CFR 1.131 is priority of invention and this may be done by any satisfactory evidence of the fact. FACTS, not conclusions, must be alleged. Evidence in the form of exhibits may accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of what it is relied upon to show. For example, submitting as evidence one or more of the following might support the allegations of fact:

- (D) – Attached reproductions of laboratory notebook entries;
- (H) – Disclosure documents.

The items in section (D) were attached but not disclosed in the affidavit and are therefore moot.

The affidavit contains no factual statements, only conclusory ones.

Applicant is then relying on items in section (H).

Proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose.

A written description does not constitute an actual reduction to practice.

Furthermore, only the filing of a US patent application that complies with the disclosure requirement of 35 USC § 112 constitutes a constructive reduction to practice. A written description, no matter how complete, does not qualify as an actual reduction to practice. Further, there is also no evidence supporting the existence of a prototype.

Finally, there is simply no relationship between the claims and the filed material.

Examiner has no idea what of the documentation submitted is purported to show anything, much less how any of the material could prove that applicant was in possession of, or had reduced to practice such invention. There is not even an analysis of any claims.

The cited information does not in any manner disclose test results of such an apparatus, merely details on how one might be constructed. Further, in order for such evidence to be accepted (even if it were present) applicant would have to provide enough detail such that examiner could determine:

-Which of the claim limitations are satisfied by the prototype (or the allegedly sufficient written description)

-What test conditions were used and if they represented actual conditions or realistically simulated ones

-And whether or not the test results demonstrated that the test was successful and reproducible. (See MPEP 608.01(p), subsection II – “Simulated or Predicted test results” and biomedical applications must show specific test data to prove the suitability and safety of a compound for a particular purpose (see MPEP 2105, section III for example) to establish utility.

Applicant is attempting to show that the disclosure documents (and possibly laboratory notebooks) are sufficient to show utility of a prototype for an application. But there is no prototype and no test results. There is only **at best** disclosure of a concept. In order to successfully swear behind a reference, applicant must show reduction to practice. There is simply no evidence of that.

III. Reduction to Practice

Applicant attempts to establish prior invention by showing RTP of the invention prior to 19 July 2000, the effective filing date of Morein.

In paragraphs 3-5 of the affidavit applicant refers to disclosure documents written prior to the critical date which applicant alleges amounts to a reduction to practice of the invention. In particular paragraph 5 states: " As indicated by Exhibit A, I was in complete possession of the invention of all claims of my patent application, and had reduced that invention to practice, prior to July 19, 2000."

Proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose.

A written description does not constitute an actual reduction to practice. Furthermore, only the filing of a US patent application that complies with the disclosure requirement of 35 USC § 112 constitutes a constructive reduction to practice. A written description, no matter how complete, does not qualify as an actual reduction to practice.

As stated above, there is simply no evidence of a prototype, **at best** (and assuming applicant had some explanation of relevance, which is **completely** lacking) it would show conception, not RTP.

IV. Diligence

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Morein reference to either a constructive reduction to practice or an actual reduction to practice. Applicant has not in any way shown that diligence was practiced between the time periods asserted. Further, applicant has actually raised more questions than applicant has answered. There is only evidence that purports that the inventor had some portion of the invention in 1998 (by the submitted laboratory notebook pages), and then some other evidence that applicant assert shows the entire invention in 1999. There is no timeline explaining applicant's actions between 1998 to reduce the invention to practice. Further, there is no evidence whatsoever to show that between November 11, 1999 and June 14, 2001 that applicant or applicant's representatives took any actions with respect to the

invention. By the very definition of diligence, applicant must have performed some actions to see that the invention was prosecuted as a patent. There is no evidence, proffered or otherwise, that applicant did anything for that 18-month period, and examiner cannot conclude that diligence was in fact existent with respect to this invention. The lack and dearth of evidence detailing applicant's actions over that time simply does not meet the required legal tests.

Response to Arguments

Applicant's arguments, see Remarks pages 1-2, filed 27 December 2004, with respect to the rejection(s) of claim(s) 1-22 under 35 U.S.C. 103(a) have been fully considered and are **NOT** persuasive. The filed affidavits under Rule 1.131 are insufficient. See above.

Therefore, the rejections of claims 1-22 under 35 U.S.C. 103(a) have been **NOT** been withdrawn.

Applicant's amendment filed 27 December 2004 amended claims 5-7, 10, and 17 in response to suggestions by examiner in the previous Office Action (see Remarks pages 1-2).

The rejection of claims 5-7, 10, and 17 under 35 U.S.C. 112, second paragraph, stands withdrawn in view of applicant's amendments.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-12, and 14-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Morein, U.S. Patent No. 6,670,955.

With regard to claim 1, Morein describes a first storage (Fig. 1, Color Buffer 116); a fragment buffer that holds multiple fragments for overlapping data (Fig. 1, Fragment Buffer 106); and one of instructions and hardware that causes said device to detect in the fragment buffer a fragment representing predetermined one of closest and furthest visible data for the pixel location (col. 5, lines 41-48 and col. 6, lines 1-3), blend the predetermined one with any preexisting contents of the first storage that represent data that is to be visible in an output image (Fig. 3, step 322), and repeat the detecting and blending until no more unprocessed fragments representing visible image data are left in the fragment buffer for the pixel location (Fig. 3, step 328); wherein detection of the predetermined one is performed using a Z-value storage to isolate during a first pass through the fragment buffer a Z-value corresponding to the predetermined one (col. 5, line 66 to col. 6, line 5), and to match during a second pass through the fragment buffer

contents of the Z-value storage against fragment buffer contents to isolate the predetermined one (col. 6, lines 6-22).

With regard to claim 2, Morein describes first, detecting any fragment representing a closest opaque data, moving such fragment to the first storage to overwrite any prior contents (col. 5, lines 30-45) and removing such fragment from further consideration as fragment buffer contents (Fig. 3, step 326); second, examining depth of fragments in the fragment buffer relative to any closest opaque data and removing from further consideration any fragments obscured by closest opaque data (col. 5, lines 49-56); and third, compositing any fragments for the pixel location remaining in the fragment buffer with contents of the pixel value storage in back-to-front order (Fig. 3, step 322).

With regard to claim 4, Morein describes the fragment buffer stores fragments that collectively representing multiple pixel locations (col. 4, lines 18-30 and col. 5, lines 45-47); the pixel value storage (Fig. 1, Color Buffer 116) is part of a frame buffer, the frame buffer having at least one first storage location for each pixel within an image region (Fig. 1, Frame Buffer 104, and col. 4, lines 37-41); and said device further comprises one instructions and hardware that composites data by successively examining fragments in the fragment buffer and by combining those fragments into the frame buffer as the predetermined one for the corresponding pixel location (Fig. 3, step 322) or returning them to the fragment buffer if they are not the predetermined one (Fig. 3, step 324), and by repeating the combining or returning until the fragment buffer is completely empty (Fig. 3, step 328).

With regard to claim 5, Morein describes first, detecting any fragment representing a closest opaque object, moving such fragment to the first storage and removing such fragment from further consideration as fragment buffer contents (col. 5, lines 30-45 and Fig. 3, step 326); second, examining depth of fragments in the fragment buffer relative to any closest opaque image object and removing from further consideration any fragments representing data obscured by a closest opaque object (col. 5, lines 46-56); and third, compositing any fragments remaining in the fragment buffer corresponding to the particular pixel location with contents the first storage in back-to-front order (Fig. 3, step 322).

With regard to claim 6, Morein describes wherein said the fragment buffer is a first-in, first out memory (col. 3, lines 51-53) and wherein said device examines successive fragments in the fragment buffer and either composites those fragments if they represent furthest visible data for a pixel location (Fig. 3, step 322), or returns those fragments to the fragment buffer if they do not represent furthest visible data a pixel location (Fig. 3, step 324), and performs the compositing or returning until the fragment buffer is completely empty (Fig. 3, step 328).

With regard to claim 7, Morein describes a state generation unit (Fig. 1, circuit 100) that produces state information to indicate at least: a state that there is a fragment for to the pixel location representing relatively closer opaque data than other fragments in the fragment buffer which have not yet been invalidated (col. 5, lines 41-48); and a state that there are at least two fragments each representing visible data for a corresponding pixel location (col. 6, lines 6-15).

With regard to claim 8, Morein describes the first storage is part of a frame buffer (Fig. 1, Frame Buffer 104) having a unique address space for each pixel location, the unique address space for each pixel location adapted to store color and intensity information as well as state information for the pixel location (col. 4, lines 58-61).

With regard to claim 9, Morein describes the Z-value storage (Fig. 1, Z-buffer 118) and the pixel value buffer (Color Buffer 116) are part of a frame buffer (Frame Buffer 104); said device further comprises a second Z-value storage (Fig. 2, Z-function logic 202); and the Z-value storage of the frame buffer and the second Z-value storage are used in alternating fashion in a manner where one Z-value storage holds a Z-value for fragment representing a predetermined one of closest and furthest visible data for a particular pixel location that will be moved and removed from the fragment buffer during a current pass through the fragment buffer (Fig. 1, Z-buffer 118 and col. 5, lines 41-45 and col. 5, line 66 to col. 6, line 5), while the other Z-value storage is used to sort Z-values for other fragments for the particular pixel location that will be moved and removed during a subsequent pass through the fragment buffer (col. 5, lines 49-65).

With regard to claim 10, Morein describes detecting a fragment representing transparent data for a pixel location (Fig. 3, step 304); storing a depth value of a detected fragment in a Z-value storage if the depth value for the fragment indicates data for the fragment is relative closer to the desired viewing perspective than data for previously detected fragments (col. 5, lines 41-48); using the stored depth value to identify the fragment representing closest remaining visible data for the pixel location (col. 5, lines 49-56), compositing the fragment with contents of the pixel value storage

for that particular pixel location (Fig. 3, step 322), and inhibiting further consideration of such detected fragment from further consideration as fragment buffer contents (Fig. 3, step 326); and repeating the processing of contents of the fragment buffer until no more fragments are left for consideration in the fragment buffer for the particular pixel location (Fig. 3, step 328). Obviously, Morein further would teach that such fragment would be transparent or at least potentially so in order to be present, which covers the amended limitation.

With regard to claim 11, Morein describes storing in the fragment buffer multiple fragments representing data overlapping in at least one pixel location (col. 4, lines 18-30 and col. 5, lines 45-47); using the hardware logic to index, detect and remove from the fragment buffer fragment representing a predetermined one of closest and furthest visible image data at the pixel location (col. 5, lines 41-48 and col. 6, lines 1-3, and Fig. 3, step 326); combining that predetermined one with any preexisting pixel value storage contents that represents visible data (Fig. 3, step 322); and repeating the using and combining until no more fragments are left in the fragment buffer that correspond the pixel location (Fig. 3, step 328).

With regard to claim 12, Morein describes first, detecting any fragment representing closest opaque data, moving such fragment to the pixel value storage to overwrite any prior contents and removing such fragment from further consideration as fragment buffer contents (col. 5, lines 30-45 and Fig. 3, step 326); second, examining depth of fragments in the fragment buffer relative any closest opaque image data and removing from further consideration any fragments that are obscured by closest opaque

data (col. 5, lines 49-56); and third, compositing the fragment buffer any fragments remaining in with contents of the pixel value storage in back-to-front order (Fig. 3, step 322).

With regard to claim 14, Morein describes generating state information indicating at least a state that there is opaque data for the pixel location relatively closer than other data represented by fragment buffer fragments which have not yet been invalidated (col. 5, lines 41-48), and a state that there are at least two fragments representing visible data for the pixel location; and using the state information for the pixel location to process fragments in a manner dependent upon the state information (col. 6, lines 6-22).

With regard to claim 15, Morein describes detecting a fragment representing transparent data for a pixel location (Fig. 3, step 304); storing a depth value associated with a detected fragment in a Z-value storage if the depth value indicates that data for the detected fragment is relatively closer to the desired viewing perspective than data for previously detected fragments (col. 5, lines 41-48); using the stored depth value to determine the closest transparent data at the particular pixel location (col. 5, lines 49-56), compositing the fragment representing closest transparent data with contents of the pixel value storage for that pixel location (Fig. 3, step 322), and inhibiting further consideration of such detected fragment from further consideration as fragment buffer contents (Fig. 3, step 326); and repeating the processing of contents of the fragment buffer until no more fragments are left for consideration in the fragment buffer for the particular pixel location (Fig. 3, step 328).

With regard to claim 16, Morein describes the repeating is performed on a fragment-by-fragment basis for fragments in the fragment buffer (Fig. 3, step 328), with fragments not constituting the predetermined one being returned to the fragment buffer (Fig. 3, step 324) in first-in, first out format (col. 3, lines 51-53), until no more fragments are left in the fragment buffer (Fig. 3, step 328).

With regard to claim 17, Morein describes first, identifying and storing a first fragment in a first buffer (Fig. 1, Render Backend Block 114 and col. 5, lines 1-4), with remaining fragments representing overlapping visible data being stored in a second buffer (Fig. 1, Fragment Buffer 106), where the first fragment represents a predetermined one of closest and furthest visible data from a desired viewing perspective (col. 5, lines 41-48 and col. 6, lines 1-3); second, generating an index that permits retrieval of the first fragment with respect to fragments in the second buffer for the particular pixel location, and storing the index in a third buffer (Fig. 1, Z-buffer 118 and col. 6, lines 6-15); and third, using the contents of the third buffer to identify and remove a fragment from the second buffer in dependence upon depth, and blending the removed fragment with contents of the first buffer (Fig. 3, step 322 and step 326).

With regard to claim 18, Morein describes the first buffer is part of a frame buffer and the frame buffer includes a pixel value storage unique to the particular pixel location (Fig. 1, color buffer 116, which is part of Frame Buffer 104); the second buffer is a fragment buffer that collectively holds fragments for multiple pixel locations (Fig. 1, Fragment Buffer 106); and the third buffer is a Z-value storage corresponding to the particular pixel location (Fig. 1, Z-buffer 118).

With regard to claim 19, Morein describes placing multiple fragments into a fragment buffer (Fig. 3, step 304); polling fragment buffer contents to identify a predetermined one of maximum and minimum Z-value for fragments for the particular pixel location (col. 5, lines 41-48 and col. 6, lines 1-3); moving the identified fragment to a frame buffer, combining that fragment with any preexisting contents that are to be visible in an output image (Fig. 3, step 322), and removing the identified fragment from further consideration as fragment buffer contents (Fig. 3, step 326); and repeating the polling and moving until no further fragments are left for the particular pixel location (Fig. 3, step 328).

With regard to claim 20, Morein describes storing fragments corresponding to many pixel locations, all collectively in the fragment buffer (col. 4, lines 18-30 and col. 5, lines 45-47); returning fragments not corresponding the predetermined one into fragment buffer for later-consideration as a predetermined one (Fig. 3, step 324); and performing the repeating until no fragments are left in the fragment buffer (Fig. 3, step 328).

With regard to claim 21, Morein describes compositing fragments for overlapping visible data in back-to-front manner, by first, polling the fragment buffer to identify any fragment representing closest opaque data for the particular pixel location and moving such fragment to a frame buffer (col. 5, lines 30-45), second, culling fragments obscured by the closest opaque data (Fig. 3, step 308), and third, identifying and compositing with contents of the frame buffer each fragment remaining the fragment buffer representing furthest data for the particular pixel location (Fig. 3, step 322).

With regard to claim 22, Morein describes means for identifying and storing any fragment representing closest opaque data (Fig. 3, step 302) or furthest transparent fragment if there is no closest opaque data (Fig. 3, step 316); and means for successively detecting and blending with the stored fragment in order of greatest depth each remaining fragment representing furthest unprocessed unobscured visible data (Fig. 3, step 322).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morein, U.S. Patent No. 6,670,055, in view of Schilling, "A New Simple and Efficient Antialiasing with Subpixel Masks".

With regard to claim 3, Morein is relied upon for describing each fragment for the pixel location, as discussed in the 102 rejections above. Morein fails to explicitly describe a sub-pixel mask and wherein said device further comprises one of instructions stored and hardware associated with the device that implements antialiasing using the sub-pixel mask to blend visual contributions by each fragment representing visible data in dependence upon the associated mask, as further recited in claim 3. However, Schilling teaches the further recited limitations of claim 3 (see Schilling, page 1, Abstract and Introduction).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Morein to incorporate the antialiasing with subpixel mask algorithm of Schilling because the use of a subpixel mask for antialiasing purposes is very common and well known, and has several advantages compared with other antialiasing techniques, including easy computation and preservation of spatial information. Motivation for such a combination may be found, for example, in Schilling, page 1, as taught in the Introduction section).

With regard to claim 13, Morein is relied upon for describing each fragment for the pixel location, as discussed in the 102 rejections above. Morein fails to explicitly describe a sub-pixel mask and wherein said method further comprises performing antialiasing using the sub-pixel mask to blend visual contributions by each fragment for the pixel location in a manner responsive to values of each mask, as further recited in claim 13. However, Schilling teaches the further recited limitations of claim 13 (see Schilling, page 1, Abstract and Introduction).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Morein to incorporate the antialiasing with subpixel mask algorithm of Schilling because the use of a subpixel mask for antialiasing purposes is very common and well known, and has several advantages compared with other antialiasing techniques, including easy computation and preservation of spatial information. Motivation for such a combination may be found, for example, in Schilling, page 1, as taught in the Introduction section).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is apprised of the following art – US 6,252,608 B1 to Snyder in view of US 6,697,063 B1 to Zhu. Applicant is further put on notice that should the previous rejections be traversed in some manner, those references will be used as the first of several rejections of the instant claims under 35 U.S.C. 103(a).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

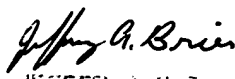
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V. Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-4:30 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric Woods


JEFFERY A. BRIN
PRIMARY EXAMINER

August 11, 2005